Appl. No. 10/627,582

Amdt. dated October 30, 2007 Amendment under 37 CFR 1.116 Expedited Procedure

Examining Group 1652

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application:

Listing of Claims:

 (currently amended) A hybrid polymerase having polymerase activity, wherein the polymerase comprises the amino acid sequence of SEQ ID NO:2 SEQ ID NO:23 and is at least 85% identical over 700 contiguous amino acids of the Pyrococcus furiosus (Pfu) polymerase sequence set forth in SEQ ID NO: 24 with the proviso that

the hybrid polymerase sequence comprises at least one hybrid position that is mutated from the native *Pfu* residue to the residue that occurs at the corresponding position of SEQ ID NO:25, wherein the hybrid position is one of the residues designated as "X" in SEQ ID NO:26.

- 2-8. (cancelled)
- (currently amended) The hybrid polymerase of claim 8 1, wherein the polymerase is fused to a sequence-nonspecific double-stranded DNA binding domain is selected from the group consisting of Sso7d, Sac7d, and Sac7e.
- (original) The hybrid polymerase of claim 9, wherein the DNA binding domain is Sso7d.
 - 11-24. (cancelled)
- 25. (currently amended) An isolated polypeptide, wherein the polypeptide comprises an the amino acid sequence of at least 94% identical to SEQ ID NO:2, and wherein the polypeptide has polymerase activity.
 - 26-27. (cancelled)

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28. (currently amended) The isolated polypeptide of claim <u>25</u> 27, wherein the <u>polypeptide is fused to a sequence-nonspecific double-stranded</u> DNA binding domain is selected from the group consisting of Sso7d, Sac7d, or Sac7e.

29. (cancelled)

30. (currently amended) The isolated polypeptide of claim $29 \ 28$, wherein the DNA binding domain is Sso7d.

31. (cancelled)

32. (withdrawn) A method of amplifying a target sequence using a hybrid polymerase, the method comprising the steps of:

providing a polymerase according to claim 1 or claim 25, combining the polymerase in an amplification reaction mixture, and amplifying the target sequence.